

Name_____ ID_____ Section_____

MATH 253

Maple Quiz

Fall 2003

Sections 506

P. Yasskin

1	/20
2	/30

TO BEGIN THE EXAM:

1. WRITE your NAME, ID and SECTION at the top of this paper.
2. TYPE your NAME, ID and SECTION at the top of the Maple Worksheet.
3. EXECUTE **with(VecCalc): VCalias:**
4. SAVE your worksheet as **yourlastname.mws** NOW and AFTER EACH PROBLEM.
5. NUMBER EACH PROBLEM.
6. Decimal values are OK.

THE EXAM:

1. Consider a box whose lid folds closed so that when closed there are two layers of cardboard in the front and on each of the two sides, while there is only one layer of cardboard on the top, bottom and back. If the box holds 3 m^3 , what are the dimensions which use the least amount of cardboard?
2. Plot the limaçon $r = 1 + 2 \sin \theta$. Then find the area inside the large loop but outside the small loop. HINTS: At what angles is $r = 0$? Subtract areas.

TO TURN IN YOUR EXAM:

1. Reduce the font to the first magnifying glass. Reduce any plots to about 1.5 inches high.
2. SAVE your file again.
3. EXECUTE: File + Print + Output to File + Print to make a postscript file in your home directory.
4. PRINT your file using **X-Print**.
 - Open a terminal window. (The monitor with a prompt $>_$ on the bottom toolbar)
 - TYPE: **xprint -J holdout -C Yasskin -d blocker yourlastname.ps** (or the **EXACT** name of your postscript file)
 - Press RETURN. The system will ask for your xprint userid and password.
 - Write the Print Identifier here: _____
5. EXECUTE: **Edit + Remove Output + From Worksheet**
6. SAVE your file again.
7. EMAIL your file as follows:
 - To: **yasskin@calclab.math.tamu.edu**
 - Attachment: **yourlastname.mws** (or the **EXACT** name of your Maple file)
 - Subject: **Sec 506**
 - Call Dr. Yasskin or your TA over to check your mailing.
 - Send the mail.
8. Turn in this paper, with your name on it, as a grading sheet.
9. Before you leave, check that Dr. Yasskin has received your printout and your email.